

Winter 2003-2004 Climate Forecast



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November 5th, 2003

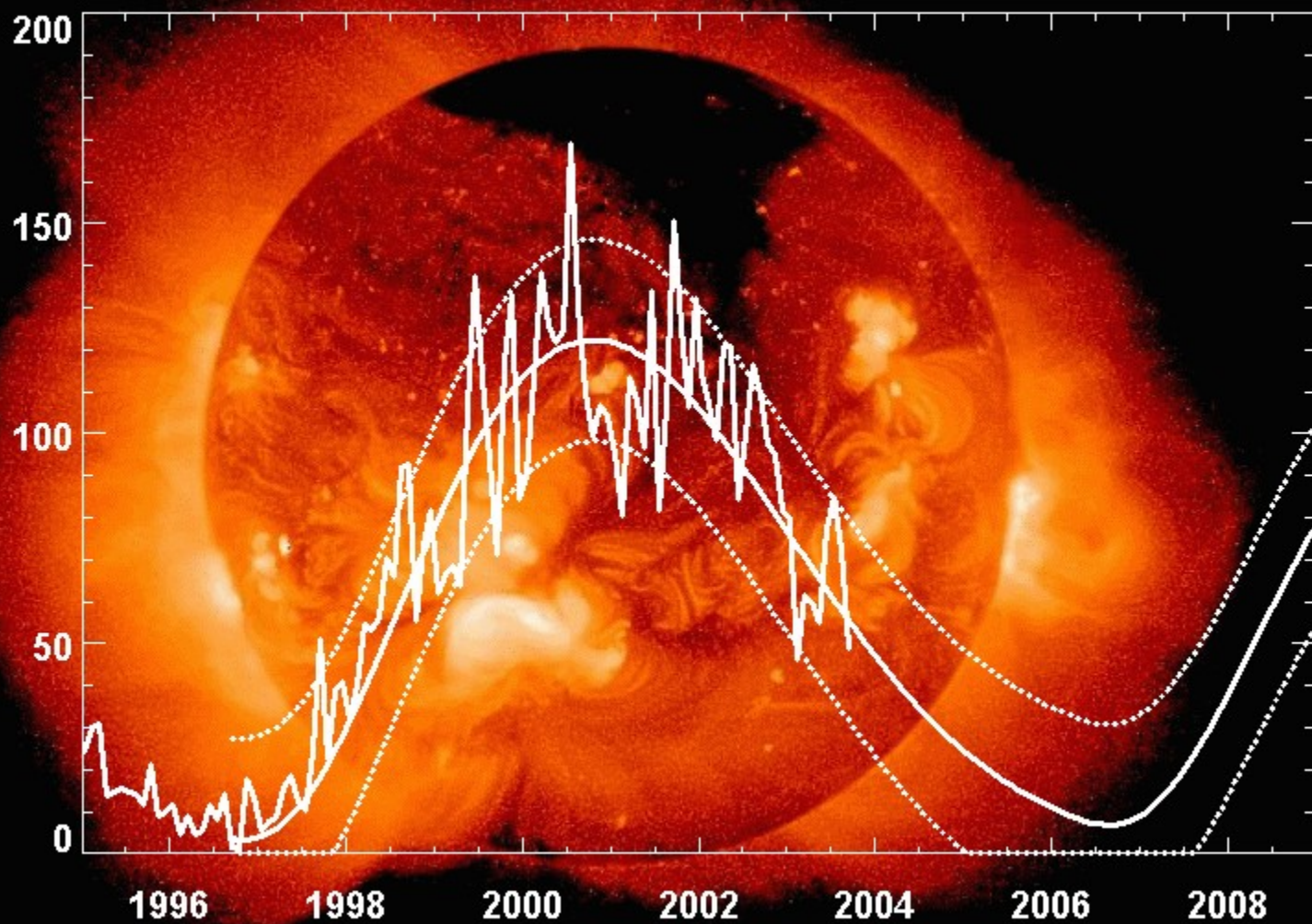
Columbia River Inter-
Tribal Fish Commission

Introduction



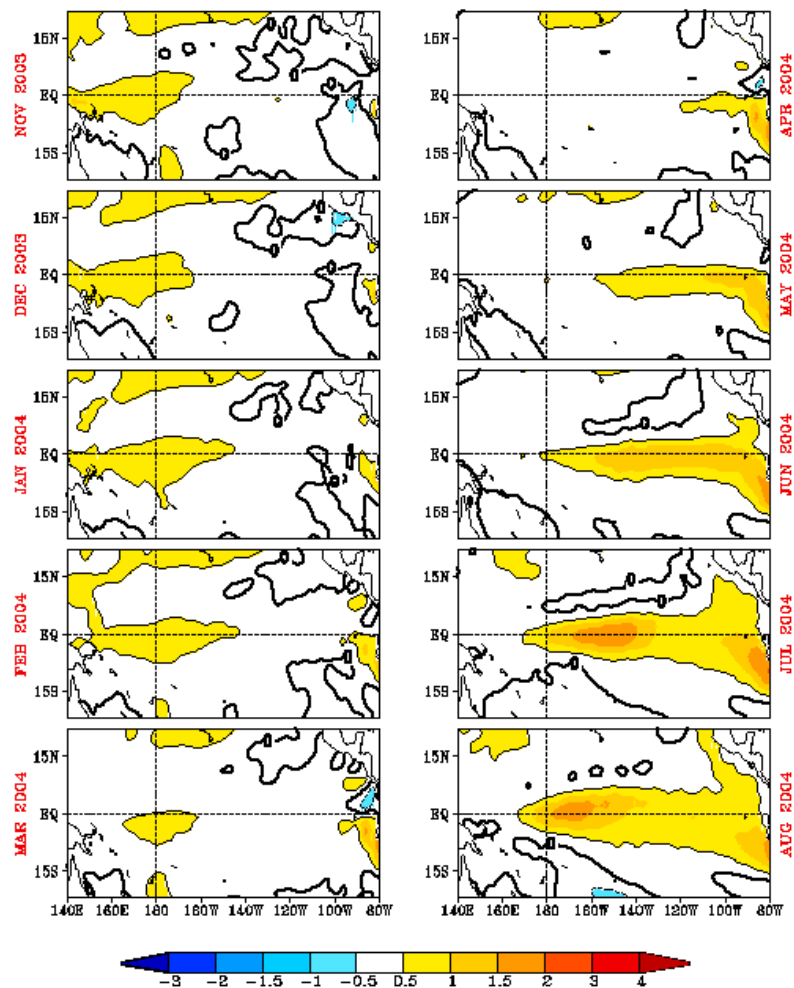
- Forecast uses a holistic approach.
- Big-picture: Solar-Forcing (e.g., sunspot cycles). Influenced the Drought of 2001?
- Sea-Surface Temperature Forecasts
- Hydro-Climate approach: use water year volume forecast and find analog years.

Cycle 23 Sunspot Number Prediction (October 2003)



SEA SURFACE TEMPERATURE DEPARTURE FORECAST

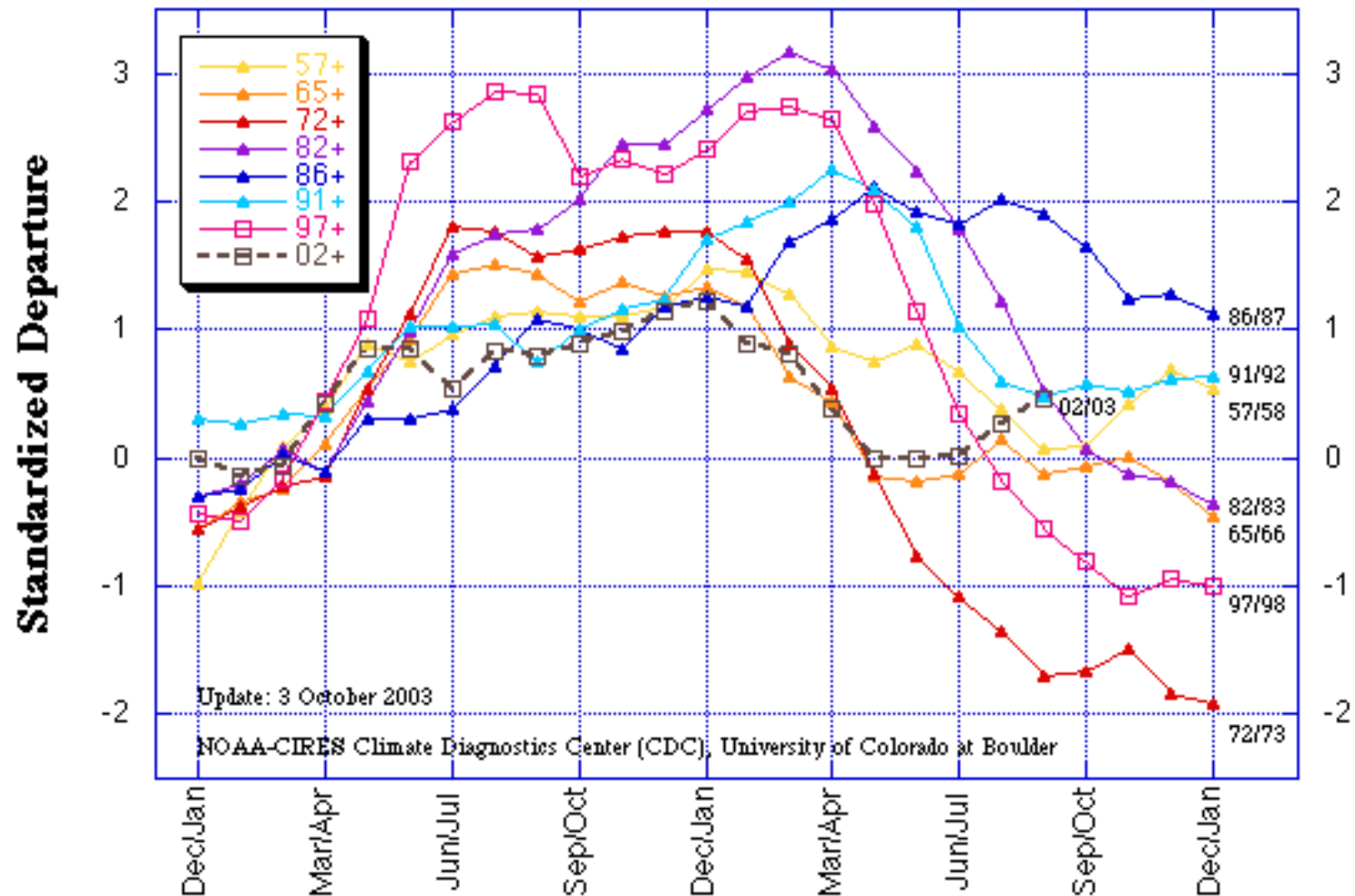
FORECAST SST ANOMALIES



Last Update: Tue Nov 4 2003

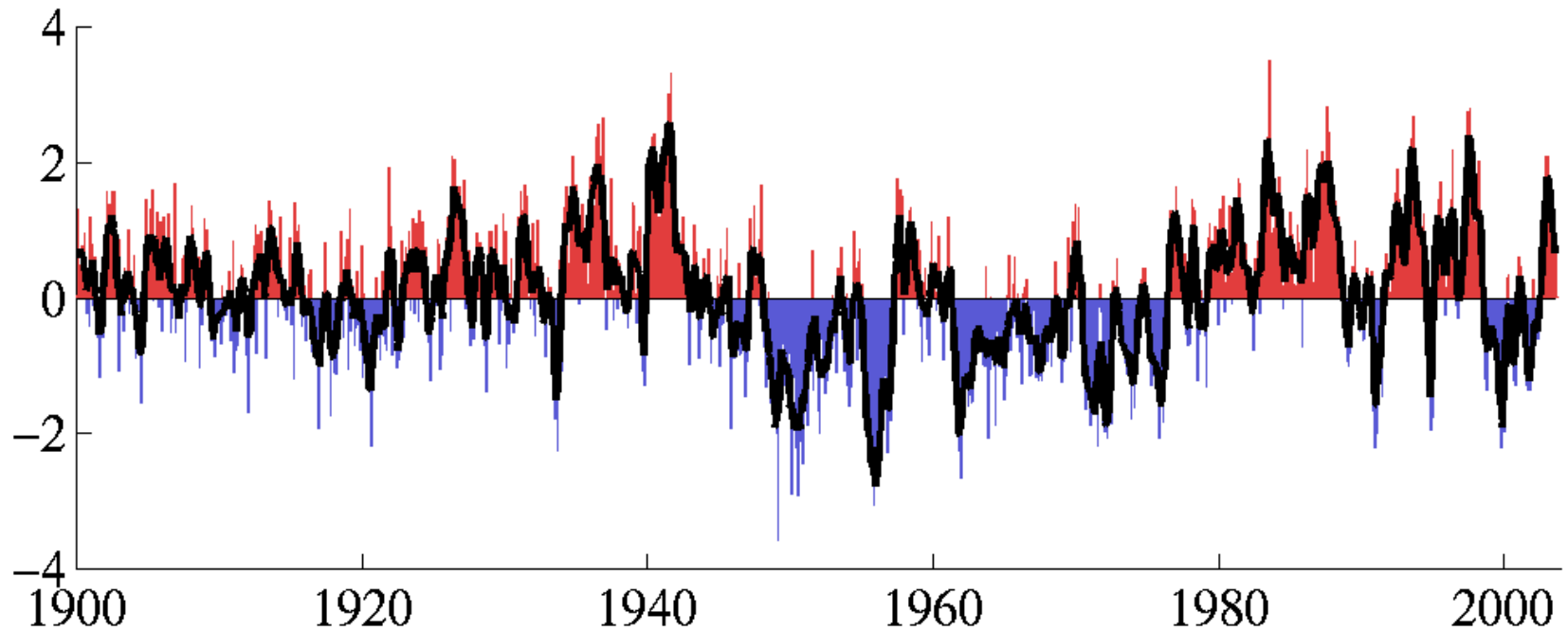
MEI-- MULTI-VARIABLE EL NINO INDEX

Multivariate ENSO Index for the strongest El Niño events since 1950 vs. current conditions

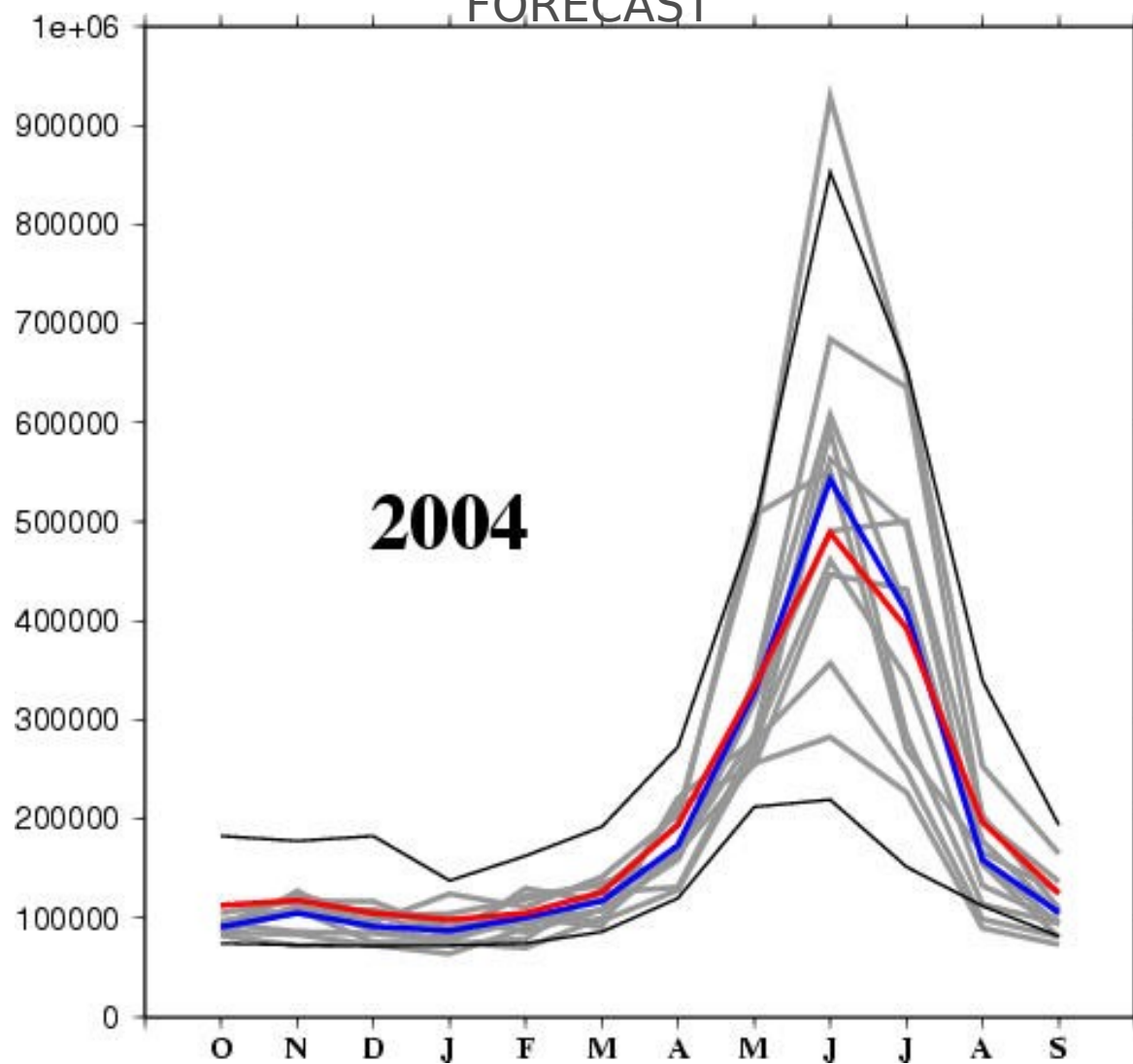


PACIFIC DECADAL OSCILLATION

monthly values for the PDO index: January 1900–September 2003



UW CLIMATE IMPACTS GROUP ONE-YEAR LEAD EXPERIMENTAL FORECAST



Summary: The Forecast



Month:	Temperature (mean monthly):	"Hedge"	Precipitation (% normal):	"Hedge"
November	Near Normal (-1.8 to + 1.8 degF)	-0.1	Near Normal (90 - 110%)	95%
December	Near Normal (-1.8 to + 1.8 degF)	-0.6	Near Normal (90 - 110%)	93%
January	Below Normal (< -1.8 degF)	-1.8	Below Normal (70 - 90%)	75%
February	Below Normal (< -1.8 degF)	-1.9	Near Normal (90 - 110%)	100%
March	Near Normal (-1.8 to + 1.8 degF)	1.2	Near Normal (90 - 110%)	102%

...but what about snow events?!